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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,202	06/24/2003	Claudio Bruno Castillon Levano	Castillon Levano I	2214
7590	07/30/2004			
John Dodds 1707 N St. NW Washington, DC 20036				
			EXAMINER THOMPSON, JEWEL VERGIE	
			ART UNIT 2855	PAPER NUMBER

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/602,202	CASTILLON LEVANO, CLAUDIO BRUNO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jewel V Thompson	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 4 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Specification*

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

2. The disclosure is objected to because of the following informalities: the claims should be on a separate sheet of paper, separating the claims from the disclosure.

Appropriate correction is required.

### *Claim Objections*

3. Claims 3-10 are objected to because of the following informalities:

**Regarding claim 3**, Examiner is not quite sure what "its" is referring to before "edges"

**Regarding claim 4**, the term "the useful range" and "the application required" have not been previously disclosed.

**Regarding claim 5**, the term "comprising" should be inserted after applications and "with the following characteristics" should be deleted. Examiner is not quite sure what "its" is referring to before "cross" and "edges"; "the intermediate" and "the symmetry" have not been previously disclosed.

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is not quite sure what "its" is referring to before "cross" and "edges"; "the intermediate" and "the symmetry" have not been previously disclosed.

**Regarding claim 6**, the term "the three consecutive elbows" have not been previously disclosed.

**Regarding claim 7**, the term "the internal section" has not been previously disclosed.

**Regarding claim 8**, the terms "the plate-free edge", "the upper limit" and "the measurement range" have not been previously disclosed.

**Regarding claim 9**, the terms "the spigots" and "the outer elbows" have not been previously disclosed.

**Regarding claim 10**, the terms "the orifices", "the transducer" and "the differential pressure" have not been previously disclosed.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 7, 9 and 10 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Osborn (4,083,245).

**Regarding claim 1**, Osborn teaches a variable obstruction method to obtain a linear ratio between the differential pressure and gas volumetric flow, which consists in using a rectangular section elbow and a flexible plate (25) on the symmetry cross section of the elbow (col. 2, lines 55-59 and fig. 1)

**Regarding claim 2**, Osborn teaches a flexible plate at a rest state matching the symmetry cross section of the elbow (fig. 1)

**Regarding claim 3**, Osborn teaches a flexible plate fixed on one of its edges to the elbow's distal curb (fig. 1)

**Regarding claim 5**, Osborn teaches a symmetric duct with regard to its cross section, with two consecutive elbows (fig. 1) and two aligned tubular inflow (17) and outflow (18) segments, and capable of measuring the flow in both directions (col. 2, lines 29-31) with similar results; a flexible rectangular plate fixed on one of its edges to the intermediate elbow's distal curb, and matches the symmetry cross section of the sensor at rest (fig. 1).

**Regarding claim 7**, Osborn teaches the internal section of the elbows is rectangular (fig. 1).

**Regarding claim 9**, Osborn teaches the spigots (35 and 37) are located on the outer elbows and are parallel to each other (fig. 1)

**Regarding claim 10**, Osborn teaches the orifices (25) and the plate fixed edge (31) is on the same side of the rectangular section of the duct (fig. 1)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn.

**Regarding claim 6**, Osborn fails to explicitly teach the angles of the three consecutive elbows are 45, 90 and 45 degrees, respectively. Osborn does teach three consecutive elbows at degrees, which may not be exactly 45, 90 and 45 degrees respectively, however there are varies degrees of angles of which the elbows are bent. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the bent elbows at the degrees shown in Osborn for the purpose of producing a laminar flow (col. 1, lines 21-22, Osborn). A modification in the angle size would have involved a mere change in the size of the angle. A change in size of the angle is generally recognized as being within the level of ordinary skill in the art and the applicant has not provided any advantage to a particular size of the angles, therefor the size of the angle of the present invention would provide the same benefit (M.P.E.P 2144.04)

***Allowable Subject Matter***

6. Claims 4 and 8 would be allowable if rewritten to overcome the objections, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4,197,857 Osborn teaches a system for measurement of oxygen uptake and respiratory quotient.

5,033,312 Stupecky teaches a gas flow meter housing

5,038,621 Stupecky teaches a variable area obstruction gas meter

4,989,456 Stupecky teaches a variable area obstruction gas meter  
which is mounted in a conduit


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, off alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
jvt

  
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